

World Climate Regions

BEFORE YOU READ

In the last section, you read about the factors that create and change climate.

In this section, you will learn about the different climates that exist around the world.

AS YOU READ

Use this graphic to take notes on world climate regions.

<i>World Climates</i>

PLACES & TERMS

tundra flat, treeless lands forming a ring around the Arctic Ocean; also, the climate region there

permafrost constantly frozen subsoil

Defining a Climate Region (page 59)

How are climate regions defined?

Geographers use information about the weather over many years to describe a climate region. The two most important factors in defining different climates are temperature and precipitation. They also use the location on a continent, topography, and elevation to help describe the climate.

The most common characteristic used to define climate is latitude. There are five general climate regions based on latitude. They are Tropical, Dry, Mid-Latitude, High Latitude, and Highland. Within the regions there are variations.

1. What are the five general climate regions?

Types of Climates

TROPICAL WET/TROPICAL WET AND DRY

(pages 60–61)

What are tropical climates like?

The tropical wet region has little variation in temperature over the year. It is always hot, with an average temperature of 79° F. The days begin sunny, but rain falls almost daily. The average amount of rain in a year is about 100 inches.

A tropical wet and dry climate has a rainy season in summer and a dry season in winter.

Temperatures are cooler in the dry season and warmer in the wet season. Rainfall is less than in the tropical wet climate region. It falls mostly in the wet season.

2. Which climate has two seasons? What are they?

SEMIARID/DESERT (pages 61–62)**How** do dry climates differ?

A semiarid climate region does receive precipitation, just not very much. Generally areas receive about 18 inches per year. Summers are hot. Winters are mild to cold. Some semiarid locations can have snow. This climate region is found in the interior of continents or in the zone around deserts. Even though it is dry, the region contains some of the most productive agricultural lands in the world.

Deserts receive less than ten inches of rain per year. They can also be hot or cool/cold. Hot deserts have low humidity and high temperatures during the day. At night, temperatures drop because the dry air cannot hold heat well. Cool/cold deserts are found in the mid-latitudes in the Northern Hemisphere.

3. Where are cool /cold deserts found?

MEDITERRANEAN/ MARINE WEST**COAST/HUMID SUBTROPICAL** (page 62)**What** are climates like near large bodies of water?

The Mediterranean climate zone is named for the land around the Mediterranean Sea. Its summers are dry and hot, and its winters are cool and rainy. This climate region supports a dense population and rich agricultural activity.

The marine west coast climate region is frequently cloudy, foggy, and damp. The winds that blow over the warm ocean water keep the temperatures warm. Precipitation in this climate region is evenly distributed throughout the year.

Long periods of summer heat and humidity are found in humid subtropical climate regions. These areas are found on the east coast of continents. They often have hurricanes in late summer or autumn. Winters are mild to cool, depending on latitude.

4. How is a Mediterranean climate different from a marine west coast climate ?

HUMID CONTINENTAL /SUBARCTIC

(pages 62–63)

What climate has four seasons?

A great variety in temperature and precipitation characterizes the humid continental climate region. It is found in the mid-latitude interiors of Northern Hemisphere continents. Air masses chilled by Arctic ice and snow flow south over these areas. They collide with tropical air masses coming from the south. This causes changing weather conditions. These areas experience four seasons.

Evergreen forests called taiga cover the lands in the subarctic region. Huge temperature variations occur in this region between summer and winter. Summers are short and cool, and winters are always very cold. Temperatures at or below freezing last five to eight months of the year.

5. Why does the humid continental region experience changing weather ?

TUNDRA/ICE CAP/HIGHLANDS (page 63)**What** is permafrost?

The **tundra** region is located in the Northern Hemisphere. Very little precipitation falls here, usually less than 15 inches per year. The land has **permafrost**. This means the subsoil is constantly frozen. The summer lasts for only a few weeks. Then the temperature may reach about 40° F.

Snow, ice, and permanently freezing temperatures are typical of the ice cap climate region. It is so cold that it rarely snows. These regions are sometimes called polar deserts. This is because they receive less than ten inches of precipitation a year.

The highland climate varies with latitude, elevation, other topography, and continental location.

6. Why are ice caps called polar deserts?
